

Application Serial No.: 10/664,920  
Reply to Office Action dated February 8, 2005

### REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1 and 3-41 are presently active in this case, Claims 1, 3-12, 18, 19, 21-23, 27, 28, 30-32, and 36-41 having been amended and Claim 2 having been canceled without prejudice or disclaimer by way of the present Amendment.

Claims 4-35 and 38-41 were indicated as being allowable if the rejection under 35 U.S.C. 112, first paragraph, is overcome.

In the outstanding Official Action, the disclosure was objected to for an improper incorporation by reference. The application refers to the German Industrial Standard DIN 50359-1, which is publicly available (e.g., at <http://www2.din.de/>) and which is referred to in other patent applications, such as U.S. Patent Nos. 6,861,124 and 6,314,798 (see also, U.S. Patent Nos. 6,801,372; 6,650,471; and 6,538,365 for terminology regarding universal hardness). The specification of the present application describes in detail the universal hardness test being utilized in the present invention, for example on pages 22-23 and 33-34. The present application discloses all of the essential information regarding the universal hardness test, and does not rely upon incorporation by reference for disclosure of such information. Accordingly, the Applicants respectfully request the withdrawal of the objection to the specification.

Claims 1-41 were rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the

invention. As noted above, the specification provides detailed disclosure of the universal hardness test on pages 22-23 and 33-34, as well as the remainder of the specification.

The standard for determining whether the specification meets the enablement requirement is whether one skilled in the art could make or use the invention from the disclosures in the application without undue or unreasonable experimentation. (See MPEP 2164.01.) In fact, the Federal Circuit has stated that a patent need not teach, and preferably omits, what is well known in the art. (See *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991) and MPEP 2164.01.) The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, is it undue. (See *In re Angstadt*, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976) and MPEP 2164.01.)

With the above standards of enablement in mind, the Applicants submit that the disclosure of the present application clearly meets the statutory enablement requirements. Accordingly, the Applicants respectfully request the withdrawal of the enablement rejection.

Since the rejection under 35 U.S.C. 112, first paragraph, is overcome for the reasons discussed above, Claims 4-35 and 38-41 are in condition for allowance.

The Applicants note that the claims have been amended to remove the term “universal” and to clarify the language used therein.

Claims 1-3 were rejected under 35 U.S.C. 102(b) as being anticipated by Sorenson et al. (U.S. Patent No. 3,194,061). For the reasons discussed below, the Applicants request the withdrawal of the anticipatory rejection.

In the Office Action, the Sorenson et al. reference is indicated as anticipating each of Claims 1-3. However, the Applicants note that a claim is anticipated only if each and every

element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As will be demonstrated below, the Sorenson et al. reference clearly does not meet each and every limitation of the independent Claims 1 and 3.

Claim 1 recites a method for evaluating a fixing member comprising carrying out a hardness test on the fixing member, which is used to fix a toner and has a surface layer, by measuring a hardness value equal to a pressure applied to the surface layer of the fixing member by a probe divided by an area of indentation as a function of indentation depth measured while the pressure is applied at a room temperature. When deformation of the surface layer as a result of the indentation depth while the pressure is applied is within an elastic range, the fixing member is regarded as a standard product. The indentation depth is recited as being less than one-fifth of a thickness of the surface layer.

In the Official Action, it was indicated that the limitation with respect to the depth of the indentation relative to the thickness of the surface layer was not considered. The Applicants note that Claim 1 has been amended to clarify the test being performed and the relationship between the indentation depth and the test being performed. Thus, the Applicants submit that the relationship between the indentation depth and the thickness of the surface layer has patentable weight, and therefore must be considered as a limitation of the claim. The Applicants submit that the Sorenson et al. reference does not disclose an indentation depth that is less than one-fifth of a thickness of the surface layer, as recited in Claim 1 of the present application.

The Sorenson et al. reference describes a measuring device for determining the

existence and the extent or degree of hardness of subsurface hard spots or other defective portions of an otherwise resilient material. The Sorenson et al. reference does not disclose any particular thickness of the resilient material on roller (18). Additionally, the Sorenson et al. reference does not discuss any particular indentation depth of the step (68) on the wheel (64) of the indicating means (11) into the resilient material on the roller (18). And, furthermore, the Sorenson et al. reference does not disclose any particular relationship between an indentation depth and a thickness of the resilient material on the roller (18). Thus, the Applicants submit that the Sorenson et al. reference clearly does not disclose an indentation depth that is less than one-fifth of a thickness of the surface layer, as expressly recited in Claim 1 of the present application.

Accordingly, the Applicants respectfully request the withdrawal of the anticipation rejection of Claim 1 of the present application.

Claim 3 of the present application recites a method for evaluating a fixing member used to fix a toner comprising carrying out a hardness test on the fixing member by measuring a hardness value equal to a pressure applied to a surface layer of the fixing member by a probe divided by an area of indentation as a function of indentation depth measured while the pressure is applied at a room temperature for the indentation depth of 1  $\mu\text{m}$  from a surface of the surface layer. When the hardness value for the indentation depth of 1  $\mu\text{m}$  is less than or equal to 30  $\text{N/mm}^2$ , the fixing member is regarded as a standard product.

The Official Action does not indicate where in the Sorenson et al. reference a teaching of a method is present where when a hardness value for an indentation depth of 1  $\mu\text{m}$  is less than or equal to 30  $\text{N/mm}^2$ , a fixing member is regarded as a standard product, as recited in

amended Claim 3 of the present application. The Applicants submit that the Sorenson et al. reference does not disclose carrying out a hardness test to determine a hardness value for an indentation depth of 1  $\mu\text{m}$ . Nor does the Sorenson et al. reference disclose a method in which a determination is made that a fixing member is regarded as a standard product when a hardness value for an indentation depth of 1  $\mu\text{m}$  is less than or equal to 30 N/mm<sup>2</sup>. Thus, the Applicants submit that the Sorenson et al. reference clearly does not disclose all of the limitations expressly recited in Claim 3 of the present application.

Accordingly, the Applicants respectfully request the withdrawal of the anticipation rejection of Claim 3 of the present application.

Claims 36 and 37 were rejected under 35 U.S.C. 103(a) as being unpatentable over paragraph 0008 of the present application in view of Fukuda et al. (U.S. Patent Pub. No. 2003/016323 A1). For the reasons discussed below, the Applicants request the withdrawal of the obviousness rejections.

The basic requirements for establishing a *prima facie* case of obviousness as set forth in MPEP 2143 include (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, (2) there must be a reasonable expectation of success, and (3) the reference (or references when combined) must teach or suggest all of the claim limitations. The Applicants submit that a *prima facie* case of obviousness has not been established in the present case because the references, either taken singularly or in combination, do not teach or suggest all of the claim limitations.

Claims 36 and 37 recite, among other features, a thermal fixing apparatus including a

fixing belt, where a hardness test is carried out by measuring a hardness value equal to a pressure applied to a surface of the fixing belt by a probe divided by an area of indentation as a function of indentation depth measured while the pressure is applied for the indentation depth of 1  $\mu\text{m}$  from the surface of the fixing belt at a room temperature, and where the hardness value of the fixing belt is less than or equal to 30  $\text{N/mm}^2$ .

The Official Action notes that paragraph 0008 of the present application does not discuss the hardness test of the belt surface. The Official Action does not indicate where in the Fukuda et al. reference a teaching of a thermal fixing apparatus is present where a hardness value of a fixing belt for an indentation depth of 1  $\mu\text{m}$  is less than or equal to 30  $\text{N/mm}^2$ , as recited in amended Claims 36 and 37 of the present application. The Applicants submit that the Fukuda et al. reference does not disclose carrying out a hardness test to determine a hardness value for *an indentation depth of 1  $\mu\text{m}$* . Nor does the Fukuda et al. reference disclose a hardness test carried out by measuring a hardness value equal to a pressure applied to a surface divided by an area of indentation as a function of *indentation depth measured while the pressure is applied*. Nor does the Fukuda et al. reference disclose a fixing belt having a hardness value that is less than or equal to 30  $\text{N/mm}^2$ . Thus, the Applicants submit that the Fukuda et al. reference clearly does not supplement the deficiencies in paragraph 0008 noted in the Official Action.

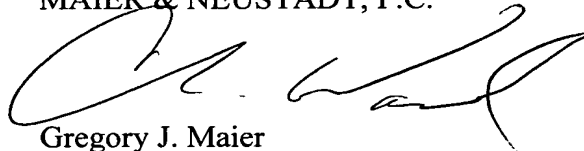
Accordingly, the Applicants respectfully request the withdrawal of the obviousness rejections of Claims 36 and 37 of the present application.

Application Serial No.: 10/664,920  
Reply to Office Action dated February 8, 2005

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Registration No. 25,599  
Attorney of Record

Christopher D. Ward  
Registration No. 41,367

Customer Number

**22850**

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 10/01)

GJM:CDW:brf  
I:\atty\cdw\24xxxx\243045US3 CIP\am1.doc